



047944

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART I - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NO.
UT UTD009667536

II. SITE NAME AND LOCATION

01 SITE NAME (Logo, common or descriptive name of site)

Signetics Corporation

02 STREET, ROUTE NO. OR SPECIFICATION LOCATION IDENTIFIER 03 CITY

1275 South 800 East

Orem

04 STATE 05 ZIP CODE 06 COUNTY 07 COUNTY CODE 08 CONG DIST.
Utah 84057 Utah 49 01

09 COORDINATES LATITUDE LONGITUDE
40 16 26.0 111 42 44.0

10 DIRECTIONS TO SITE (Starting from nearest public road)

Facility north of University Parkway on the east side of 800 east. Tank located 300 ft. east of 800 east.

III. RESPONSIBLE PARTIES

01 OWNER (if known) 02 STREET (Business, mailing, residential)
Signetics Corporation 811 E. Arques Avenue

03 CITY 04 STATE 05 ZIP CODE 06 TELEPHONE NUMBER
Sunnyvale CA 94086 (408)739-7700

07 OPERATOR (if known and different from owner)
Signetics Corp.

08 STREET (Business, mailing, residential) 09 CITY 10 STATE
1275 South 800 East Orem UT

11 ZIP CODE 12 TELEPHONE NUMBER
84057 (801)225-6600

13 TYPE OF OWNERSHIP (Check one)

X A. PRIVATE B. FEDERAL: C. STATE
D. COUNTY E. MUNICIPAL F. OTHER: G. UNKNOWN
(Specify)

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

X A. RCRA 3001 DATE RECEIVED 11/19/80
B. UNCONTROLLED WASTE SITE (CERCLA 103c) DATE RECEIVED ___/___/___
C. NONE

IV CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION BY (Check all that apply)

YES DATE ___/___/___ A. EPA B. EPA CONTRACTOR
X NO C. STATE D. OTHER CONTRACTOR
E. LOCAL HEALTH OFFICIAL
F. OTHER: (Specify)

CONTRACTOR NAME(S):

02 SITE STATUS (check one)

X A. ACTIVE B. INACTIVE C. UNKNOWN

03 YEARS OF OPERATION 1980 present
BEGINNING YEAR ENDING YEAR UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT KNOWN OR ALLEGED

Chemical analysis was performed on the tank contents by Signetics and Oil and Solvent Process Company. The major solvents present were trichloroethane, toluene, xylene, cellosolve acetate, acetone, and aliphatics. Prior to November 1980, Signetics was spraying solvents over the area of the parking lot.

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IV CHARACTERIZATION OF POTENTIAL HAZARD continued

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

The solvents stored in the tank had the potential for leakage into the groundwater and soil. The tank and solvents were removed. Soil samples and tank monitoring indicate no detectable solvents had escaped. EMCON Associates (San Jose) conducted a hydrologic and groundwater study for Signetics Corporation. Contamination was found in the shallow groundwater aquifer below the facility. The contamination is a result of the solvent spraying.

V PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one, if high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

A. HIGH X B. MEDIUM
(inspection required promptly) (inspection required)
C. LOW D. NONE
(inspect on time available basis) (No further action needed, complete current disposition form)

VI INFORMATION AVAILABLE FROM

01 CONTACT 02 OF (Agency, Organization) 03 TELEPHONE NUMBER
Connie S. Nakahara USDH/Solid & Hazardous Waste (801)533-4145
04 PERSON RESPONSIBLE FOR ASSESSMENT 05 AGENCY 06 ORGANIZATION 07 TELEPHONE NO.
Dale Parker, Ph.D. USDH BSHW (801)533-4145
08 DATE

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION
01 STATE 02 SITE NO.
UT UTD00966756

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply) 02 WASTE QUANTITY AT SITE
A. SOLID E. SLURRY (Measures of waste quantities must be independent)
B. POWDER, FINES X F. LIQUID
X C. SLUDGE G. GAS TONS
D. OTHER CUBIC YARDS
(Specify) NO. OF DRUMS

03 WASTE CHARACTERISTICS (Check all that apply)

A. TOXIC E. SOLUBLE I. HIGHLY VOLATILE
B. CORROSIVE F. INFECTIOUS J. EXPLOSIVE
C. RADIOACTIVE X G. FLAMMABLE K. REACTIVE
D. PERSISTENT H. IGNITABLE L. INCOMPATIBLE
M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			Sludge left in tank. Tank disposed by USPCI TSDF
OLW	OILY WASTE			
SOL	SOLVENTS	4000 gal.		solvent transported and recycled into
PSD	PESTICIDES	DF2312		laquer wash by Oil and Solvent Process Co.
OCC	OTHER ORGANIC CHEMICALS			Unknown quantities of organic solvents were
IOC	INORGANIC CHEMICALS			sprayed on the soil (parking lot)
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/ DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	Arsenic		Disposed	0.15	mg/l
	Chrom		by USPCI TSDF	0.05	mg/l
SOL	Toluene	108-88-3	Disposed by	0.3%	
	Ethylbenzene	100-41-4	Chemical Waste	3.0%	
	n-Butyl Acetate	123-86-4	Management	7 %	
	Xylene Isomers			12.6%	
SOL	Trichloromethane	2523-89-1		4%	
*solvents sprayed on soil not specified					
substances found in EMCON analysis are as follows:					
SOL	Tetrachloromethane	127-18-4	spraying on soil		unknown
SOL	Trichloromethylene	19-01-6	spraying on soil		unknown
SOL	Toluene	108-88-3	spraying on soil		unknown
SOL	Benzene	71-43-2			
SOL	Ethyl Benzene	100-41-4			

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

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POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NO.

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II. HAZARDOUS CONDITIONS AND INCIDENTS

01 A. GROUNDWATER CONTAMINATION 02 OBSERVED (DATE: _____) POTENTIAL

03 POPULATION POTENTIALLY AFFECTED: 64,000 X ALLEGED

04 NARRATIVE DESCRIPTION

Groundwater generally flows southwest. Borings on the facility located groundwater approximately 80 ft. deep in a permeable coarse sand and gravel layer. The tanks liquid level was monitored weekly and no drops in level were noted. A study conducted by EMCOR Associates (1982) for Signetics indicated contamination of the shallow aquifer below the facility. Three on-site shallow aquifer wells were drilled for the investigation. Well #1 was located in the north east portion of the parking lot. Trichloroethylene, tetrachloroethane, benzene, toluene, and ethylbenzene were found in the samples. Well #3 showed trichloroethylene and 1,1,1-trichloroethane present. Tetrachloroethane and ethylbenzene were found in Well #4. EMCOR Associates found no evidence of deep aquifer contamination. (BSHW file)

01 B. SURFACE WATER CONTAMINATION 02 OBSERVED (DATE: _____) X POTENTIAL

03 POPULATION POTENTIALLY AFFECTED: 400 ALLEGED

04 NARRATIVE DESCRIPTION

Provo River runs a 1/4 mile southeast of the facility. Provo River runs into Utah Lake. Soil samples and tank monitoring indicate no apparent leakage of solvents. Contamination of the shallow groundwater aquifer occurred.

01 C. CONTAMINATION OF AIR 02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 1,360 04 NARRATIVE DESCRIPTION

No recorded history.

01 D. FIRE/EXPLOSIVE CONDITIONS 02 OBSERVED (DATE: _____) POTENTIAL

03 POPULATION POTENTIALLY AFFECTED: 1,900 ALLEGED

04 NARRATIVE DESCRIPTION

No recorded history. Underground tank containing flammable solvents were removed and disposed.

01 E. DIRECT CONTACT 02 OBSERVED (DATE: _____) X POTENTIAL ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 1,360 04 NARRATIVE DESCRIPTION

The entire facility is fenced in with the entrance monitored security guards are present on the facility. The area containing the solvents is secure. (Kurt Nelson, USDH)

01 F. CONTAMINATION OF SOIL 02 OBSERVED (DATE: _____) POTENTIAL X ALLEGED

03 AREA POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

The area has a coarse sand and gravel layer from 118 to 140 ft. deep. A gray clay layer lies below the sand and gravel. Six soil samples were taken at various locations around the tank in compliance with UTBL recommendations. No detectable levels were found for any of the several major volatile organic solvents held in tank. Samples taken 11/18/83. Solvent wastes in unknown quantities were sprayed on the soil (parking lot) prior to November 1980.

01 G. DRINKING WATER CONTAMINATION 02 OBSERVED (DATE: _____) X POTENTIAL

03 POPULATION POTENTIALLY AFFECTED: 64,000 ALLEGED

04 NARRATIVE DESCRIPTION

Soil samples and tank monitoring indicate no significant levels of solvents escaped tank. An Orem City drinking water well is located a 1/2 mile south of the facility. Sample analysis show no evidence of contamination. The water from the Orem well is drawn from a deep water aquifer. The deep water and shallow water supply zones are separated by clay layers. Water is transmitted between water zones during certain precipitation periods. Contaminants from the shallow aquifer below the facility have the potential of being transmitted to the deep water aquifer, which could contaminate the drinking water of the entire Orem population. (The drinking water for Orem City is obtained from a mix of various wells and springs in the Orem area.)

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II. HAZARDOUS CONDITIONS AND INCIDENTS continued

01 H. WORKER EXPOSURE/INJURY 02 OBSERVED (DATE:) X POTENTIAL ALLEGED

03 WORKERS POTENTIALLY AFFECTED: 4500 04 NARRATIVE DESCRIPTION

Area containing the solvents is closely monitored by security guards unauthorized personnel are not allowed in the area. Workers may be exposed to solvents that were sprayed in the parking lot. (Kurt Nelson, USDH)

01 I. POPULATION EXPOSURE/INJURY 02 OBSERVED (DATE:) X POTENTIAL ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 64,000 04 NARRATIVE DESCRIPTION

Exposure may result if drinking water is contaminated.

EPA FORM 2070-12(7-81)

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I. IDENTIFICATION
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II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 J. DAMAGE TO FLORA 02 OBSERVED (Date: _____) X POTENTIAL ALLEGED

04 NARRATIVE DESCRIPTION

Potential exists if contamination of surface and groundwater occurs.

01 K. DAMAGE TO FAUNA 02 OBSERVED (DATE: _____) X POTENTIAL ALLEGED

04 NARRATIVE DESCRIPTION

Potential exists if contamination of surface and groundwater occurs.

01 L. CONTAMINATION OF FOOD CHAIN 02 OBSERVED (DATE: _____) POTENTIAL

04 NARRATIVE DESCRIPTION

X ALLEGED

Potential exists if contamination of surface and groundwater occurs.

01 M. UNSTABLE CONTAINMENT OF WASTES 02 OBSERVED (Date: _____) POTENTIAL
(Soils/runoff/standing liquids/leaking drums) X ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

The noncorrosive flammable solvents were contained in the underground tank. The tank was removed and disposed during 1983. Soil was contaminated from the spraying of unknown quantities of solvents on the parking lot.

01 N. DAMAGE TO OFFSITE PROPERTY 02 OBSERVED (DATE: _____) POTENTIAL

04 NARRATIVE DESCRIPTION

ALLEGED

No recorded history.

01 O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

X POTENTIAL

ALLEGED

No recorded history. The concrete pad area that stored drums was rinsed with deionized water (pH 5.5). The rinse water had a pH of 6.5 indicating no residual corrosive material. Any runoff into sewers and drains should also indicate no residual corrosive material. (Test performed by Signetics.) Soil was contaminated in the parking lot area, thus a potential of sewer, storm drains, and WWTPs contamination exists from runoff.

01 P. ILLEGAL/UNAUTHORIZED DUMPING 02 OBSERVED (DATE: _____) POTENTIAL

04 NARRATIVE DESCRIPTION

X ALLEGED

Spraying of unknown quantities of solvent wastes occurred until November 1980.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: 64,000

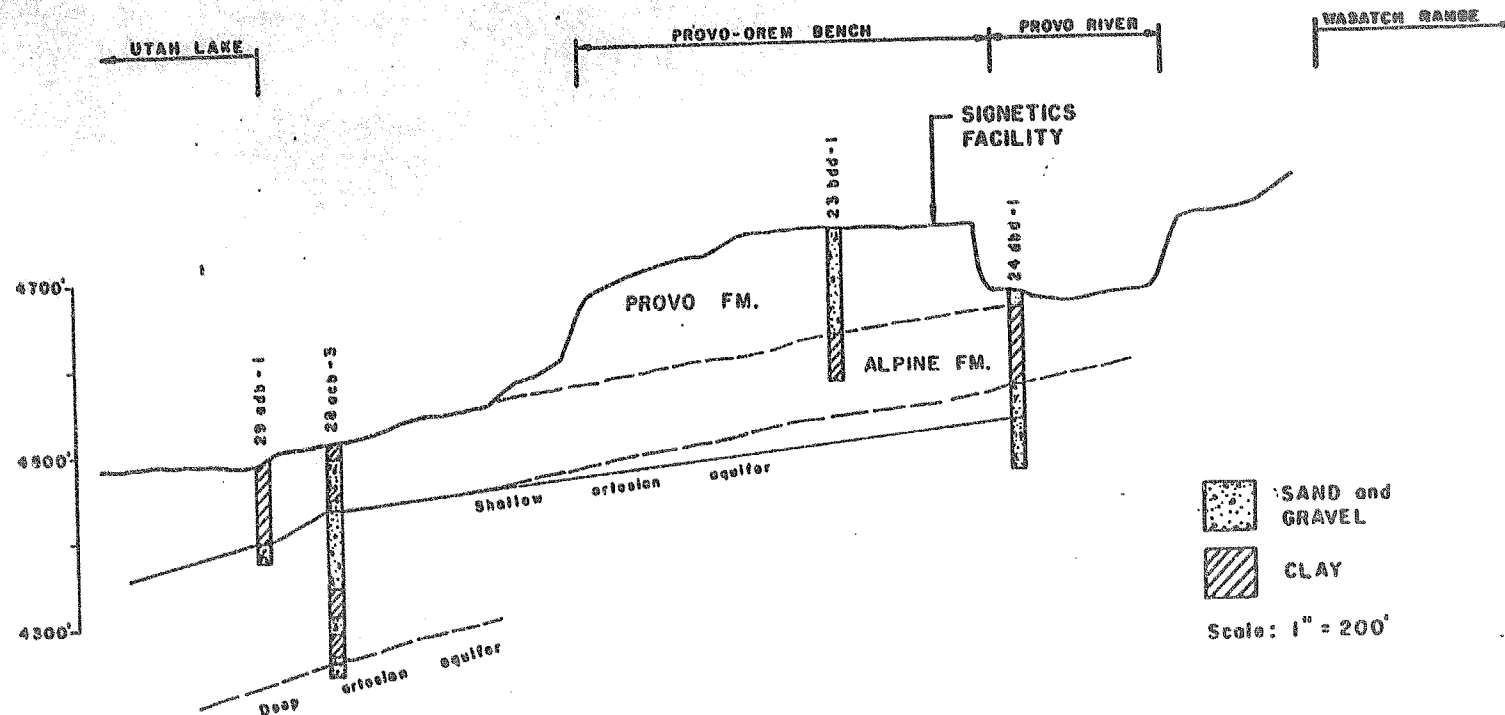
IV COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

U.S.D.H. Bureau of Solid and Hazardous Waste Files

Orem City Public Works phone conversation

Kurt Nelson, Utah State Health Department, Bureau of Solid and Hazardous Waste



Emcon
Associates

San Jose, California

SIGNETICS CORPORATION
HYDROGEOLOGIC INVESTIGATION
OREM, UTAH

GEOLOGIC SECTION

FIGURE

2

PROJECT NO.
377-3.1

1300 SOUTH

500 EAST STREET

EXISTING BUILDING

waste water neut. system
20' x 20'

waste chem.
storage

PARKING

SUB-
STATION

METAL
BLD'G

CEMENT

FRONTAGE ROAD